

**REMARKS**

Claims 1-20 were pending in this application.

Claims 1-20 have been rejected.

Claim 8 has been amended as shown above.

Claims 1-20 remain pending in this application.

Reconsideration and full allowance of Claims 1-20 are respectfully requested.

**I. INTERPRETATION OF CLAIMS**

The Office Action improperly interprets Claims 1-20. In particular, the Office Action improperly attempts to equate the phrases “branch conditions” and “branch addresses” in Claims 1-20.

First, “branch addresses” and “branch conditions” are not interchangeable and do not refer to the same elements. The Applicants’ specification clearly recites that a “branch condition” is used to select either a “branch address” or a “next program counter address.” (*Application, Page 21, Lines 1-3*). The Office Action refuses to acknowledge this difference, asserting instead that these are limitations that do not appear in the claims. (*Office Action, Page 3, Section 8*).

It is proper to refuse to read limitations into the claims. However, the claims must be given their “broadest reasonable interpretation consistent with the specification.” (*MPEP § 2111*). The Office Action ignores the express recitations in the specification that “branch conditions” and “branch addresses” are different elements. Instead, the Office Action uses a

non-technical dictionary definition of “condition” to assert that “branch addresses” are “branch conditions.” (*Office Action, Page 4, Section 10*).

The Applicants’ specification clearly shows that “branch addresses” and “branch conditions” are not equivalent. The Office Action fails to interpret the claims in a way that is consistent with the specification by equating “branch conditions” with “branch addresses.” Because this interpretation conflicts with the express recitations in the specification, this interpretation of the claims is improper and fails to comply with the MPEP.

Second, the definition relied upon by the Office Action fails to equate “branch addresses” and “branch conditions.” The Office Action first states that a “condition” is “something essential to the appearance or occurrence of something else.” (*Office Action, Page 4, Section 10*). The Office Action then asserts that a “branch instruction” cannot branch unless a “branch address” is known. (*Office Action, Page 4, Section 10*). The Office Action then, without any explanation, assumes that a “branch address” is a “branch condition” because “the branch address is essential for the instruction to branch.” (*Office Action, Page 4, Section 10*).

At most, the Office Action has shown that a branch address is part of or associated with a branch instruction. This in no way establishes that “branch conditions” are equivalent to “branch addresses.” Moreover, this does not overcome the express recitations in the Applicants’ specification that a “branch address” is selected based on a “branch condition.” The Office Action cannot equate “branch conditions” and “branch addresses” in a way that contradicts the express recitations in the Applicants’ specification.

Third, the reference cited against the claims (U.S. Patent No. 4,991,080) makes the same

distinction between addresses and conditions. U.S. Patent No. 4,991,080 clearly recites that a conditional branch represents a branch in an instruction that is taken “if a condition ... is a specified value.” (*Col. 1, Lines 37-42*). The “condition” is different than a “branch target address” recited in U.S. Patent No. 4,991,080. (*Col. 23, Lines 37-40*).

For these reasons, the Office Action cannot equate the phrases “branch conditions” and “branch addresses” in Claims 1-20.

## **II. REJECTION UNDER 35 U.S.C. § 102**

The Office Action rejects Claims 1-13 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,991,080 to Emma et al. (“*Emma*”). The Applicants respectfully traverse this rejection.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. (*MPEP § 2131; In re Bond, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)*). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. (*MPEP § 2131; In re Donohue, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985)*).

As noted in the Applicants’ response to the prior Office Action, the Patent Office must show that elements 201, 401, 601, and 701 of *Emma* (relied upon as anticipating the “non-branching cluster” recited in Claims 1 and 8) are capable of “computing branch conditions.” The Office Action must also show that elements 301 and 501 of *Emma* (relied upon as anticipating

the “branching cluster” recited in Claims 1 and 8) are capable of performing “branch address computations” for all of the elements 201-701.

The Office Action cites column 23, lines 35-47 to show that elements 301 and 501 of *Emma* anticipate the “branching cluster” capable of computing “branch conditions” as recited in Claims 1 and 8. However, this portion of *Emma* only refers to a “branch target address.” The Applicants note that a “branch target address” is not a “branch condition” as recited in Claims 1 and 8.

The Office Action cites column 23, line 23 – column 24, line 17 to show that elements 201, 401, 601, and 701 of *Emma* anticipate the “non-branching cluster” capable of computing “branch conditions” as recited in Claims 1 and 8. However, this portion of *Emma* only refers to a “branch target address.” The Applicants once again note that a “branch target address” is not a “branch condition” as recited in Claims 1 and 8.

For these reasons, the Office Action fails to establish that *Emma* anticipates all elements of Claims 1 and 8. As a result, the Office Action fails to establish that *Emma* anticipates the Applicants’ invention as recited in Claims 1 and 8 (and their dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 102 rejection and full allowance of Claims 1-13.

### **III. REJECTION UNDER 35 U.S.C. § 103**

The Office Action rejects Claims 14-20 under 35 U.S.C. § 103(a) as being unpatentable over *Emma* in view of U.S. Patent No. 4,777,589 to Boettner et al. (“*Boettner*”). The Applicants

respectfully traverse this rejection.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. (MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. (*In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references

when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (*MPEP* § 2142).

As described above in Section II, the Office Action fails to establish that *Emma* anticipates a "branching cluster" and a "non-branching cluster" that are each "capable of computing branch conditions." The Office Action cites *Boettner* only as allegedly reciting a "plurality of peripheral circuits." The Office Action does not rely on *Boettner* as disclosing, teaching, or suggesting a "branching cluster" and a "non-branching cluster" that operate as recited in Claim 14.

For these reasons, the Office Action fails to establish that the proposed *Emma-Boettner* combination discloses, teaches, or suggests all elements of Claim 14. As a result, the Office Action fails to establish a *prima facie* case of obviousness against Claim 14 (and its dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 103 rejection and full allowance of Claims 14-20.

#### IV. CONCLUSION

As a result of the foregoing, the Applicants assert that the claims in this application are in condition for allowance and respectfully request an early allowance of such claims.

SUMMARY


If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication (including any extension of time fees) or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

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